

# Invasive Northern Pike Eradication Progress



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RC 3 Tab 4



# Northern Pike Range

-  Native Range
-  Introduced Range

0 125 250 500 Miles



Salmon fingerlings in pike stomachs from Alexander Creek





## Pike Suppression:

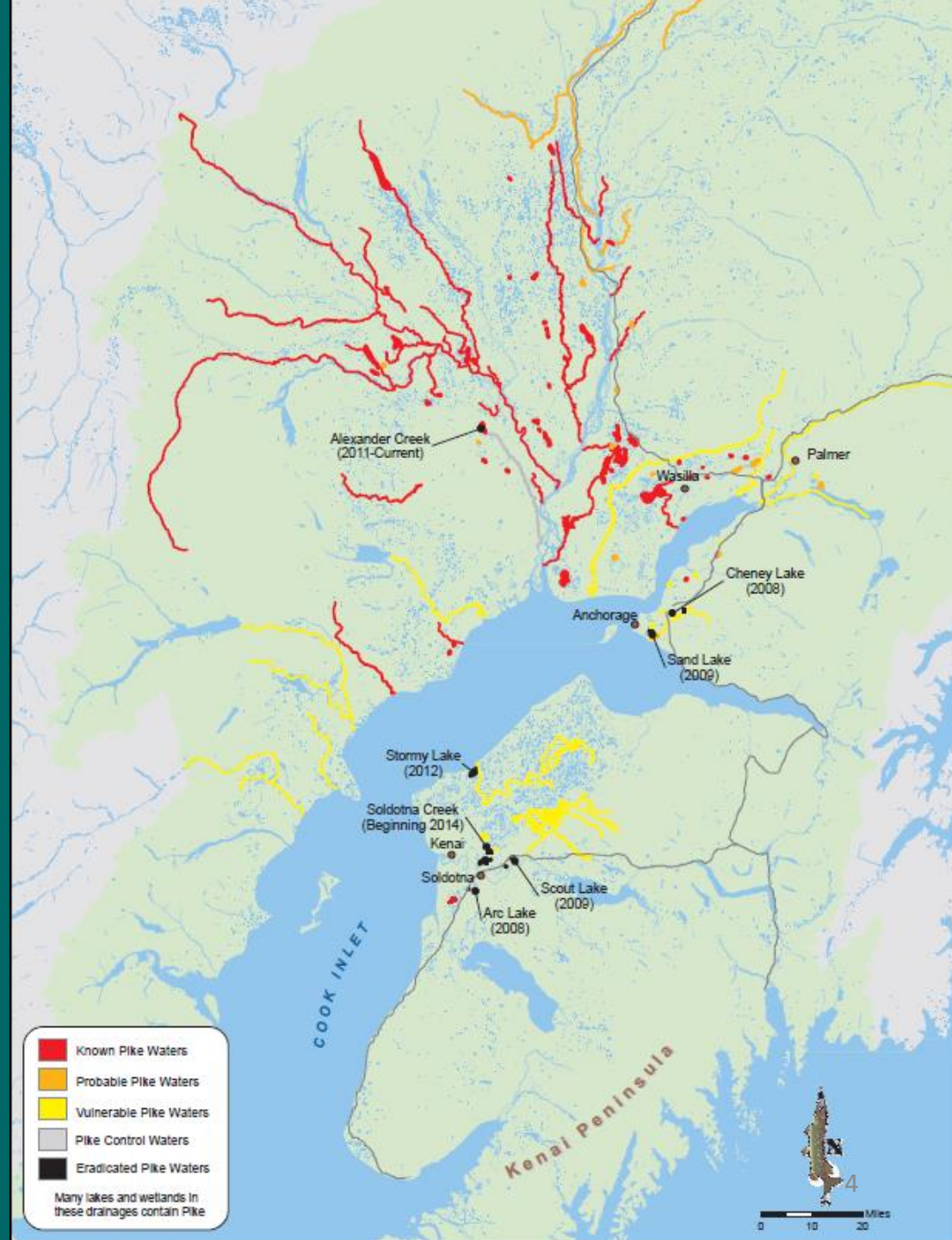
Mat-Su: Alexander Creek

## Eradications to Date:

Anchorage: Cheney Lake  
Sand Lake  
Otter Lake

Yakutat: Village Pond System

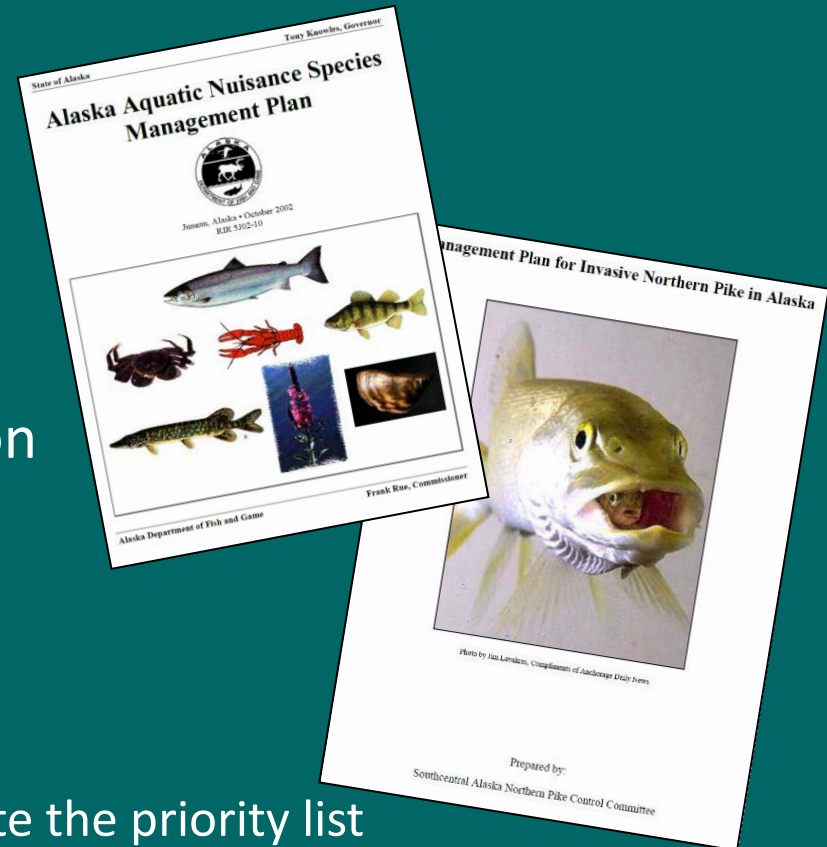
Kenai Pen.: Arc Lake  
Scout Lake  
Stormy Lake  
Union Lake  
East Mackey Lake  
West Mackey Lake  
Derks Lake  
Sevena Lake  
Soldotna Creek  
Loon Lake  
Tiny Lake  
Hall Lake  
Warfle's Lake



# Strategic Planning

## Prioritization Process

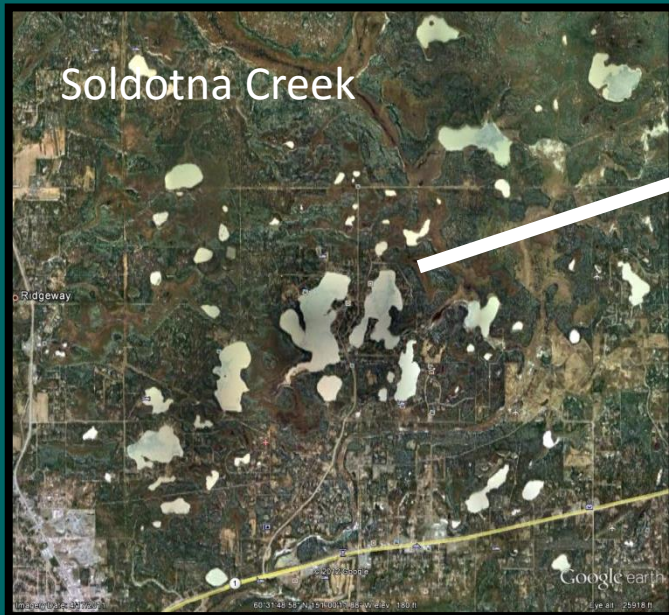
- Criteria based on:
  - Threats to fisheries
  - Habitat significance
  - Watershed characterization
  - Cultural significance
  - Economic impacts
  - Feasibility



Pike committee meets every two years to update the priority list

➔ **Prevent Spread**

# Recent Rotenone Projects

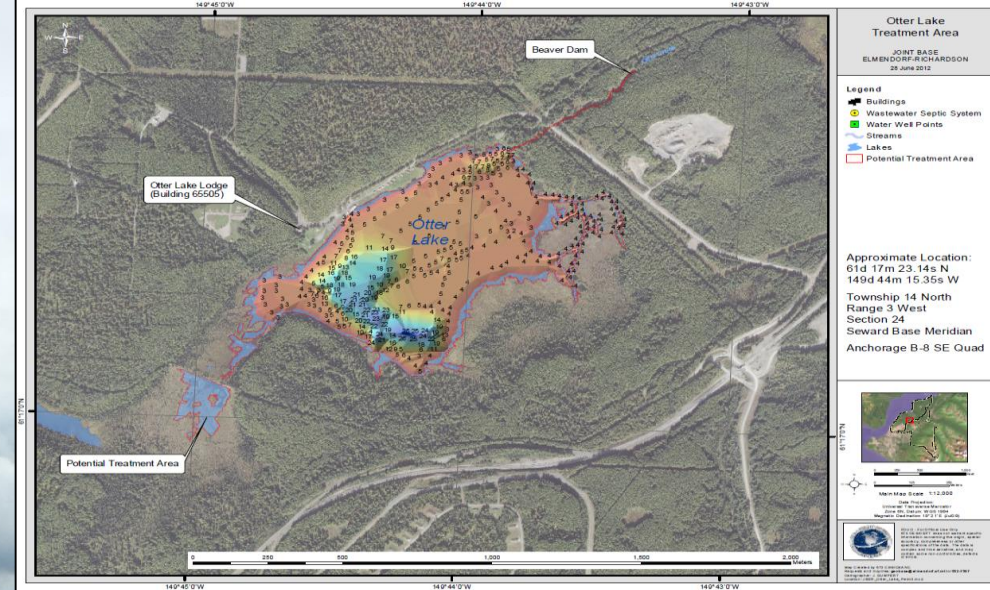


Both were high priority projects  
to prevent pike from spreading





# OTTER LAKE







# OTTER LAKE TREATMENT





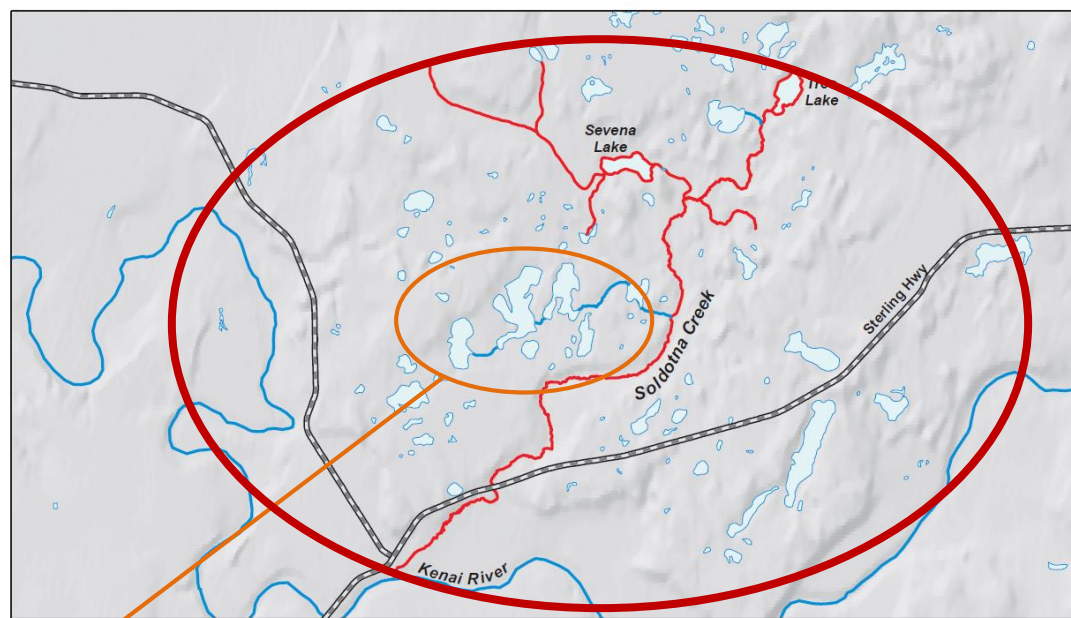
# SOLDOTNA CREEK

## Soldotna Creek Treatment Areas

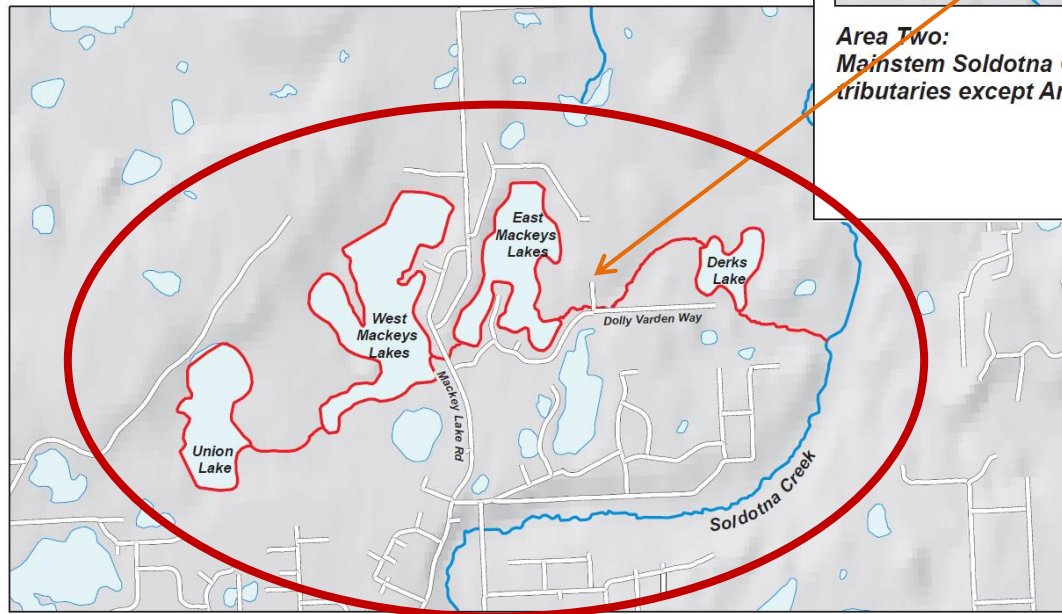
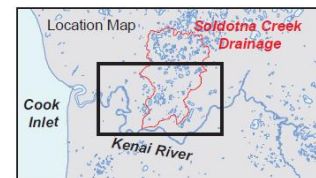
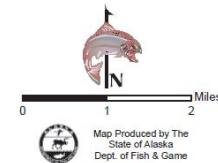
### Area 1

Union Lake, West Mackeys Lake,  
East Mackeys Lake, Derks Lake

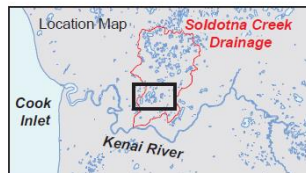
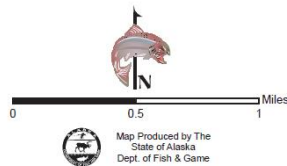
Treatment Timing: 2014



**Area Two:**  
Mainstem Soldotna Creek and all  
tributaries except Area One



**Area One:**  
Western Branch of the  
Soldotna Creek Drainage



### Area 2

Sevena Lake, Tree Lake,  
Mainstem of Soldotna Creek

Treatment Timing: 2016 and 2017

Native Fish Relocation effort from  
Area 2 → Area 1 in 2015





# SOLDOTNA CREEK TREATMENTS







Area 2  
Deactivation  
(Summer 2016 and 2017)



Area 1  
Deactivation  
(Fall 2014)

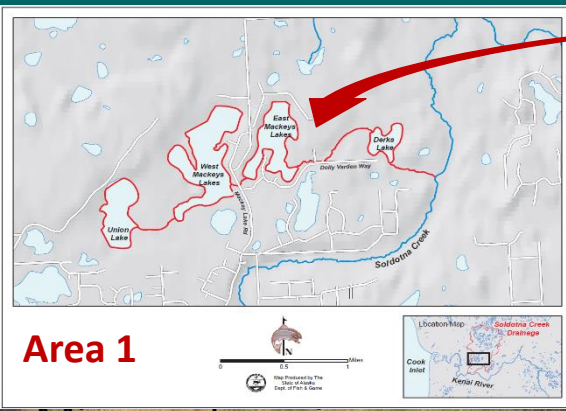


# Post-Treatment Evaluations

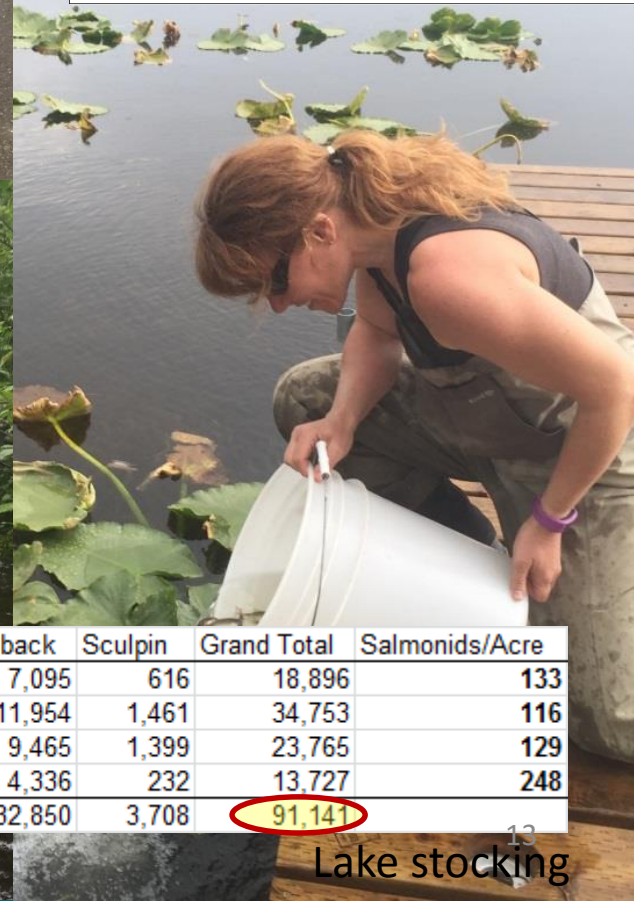
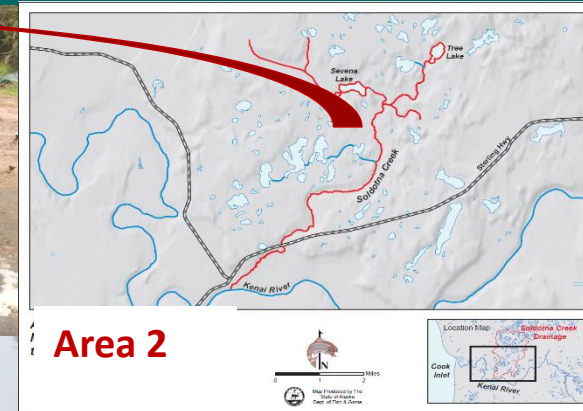




# Native Fish Rescue/Restoration 2015-2017



Minnow trapping



| Lake          | Acres      | Years     | Rainbow Trout | Dolly Varden | Juv. coho salmon | Stickelback   | Sculpin      | Grand Total   | Salmonids/Acre |
|---------------|------------|-----------|---------------|--------------|------------------|---------------|--------------|---------------|----------------|
| Union         | 84         | 2015-2017 | 510           | 710          | 9,965            | 7,095         | 616          | 18,896        | 133            |
| W. Mackey     | 184        | 2015-2017 | 1,645         | 2,027        | 17,666           | 11,954        | 1,461        | 34,753        | 116            |
| E. Mackey     | 100        | 2015-2017 | 1,149         | 1,286        | 10,466           | 9,465         | 1,399        | 23,765        | 129            |
| Derks         | 37         | 2015-2017 | 229           | 378          | 8,552            | 4,336         | 232          | 13,727        | 248            |
| <b>Totals</b> | <b>405</b> |           | <b>3,533</b>  | <b>4,401</b> | <b>46,649</b>    | <b>32,850</b> | <b>3,708</b> | <b>91,141</b> |                |



# Remove Fish Barriers



E. Mackey Lake outlet



Derks Lake outlet



Union Lake outlet




Of 8 temporary barriers, three remain but will be removed this year if no pike are detected



# Current Status of Kenai Peninsula Pike Waters



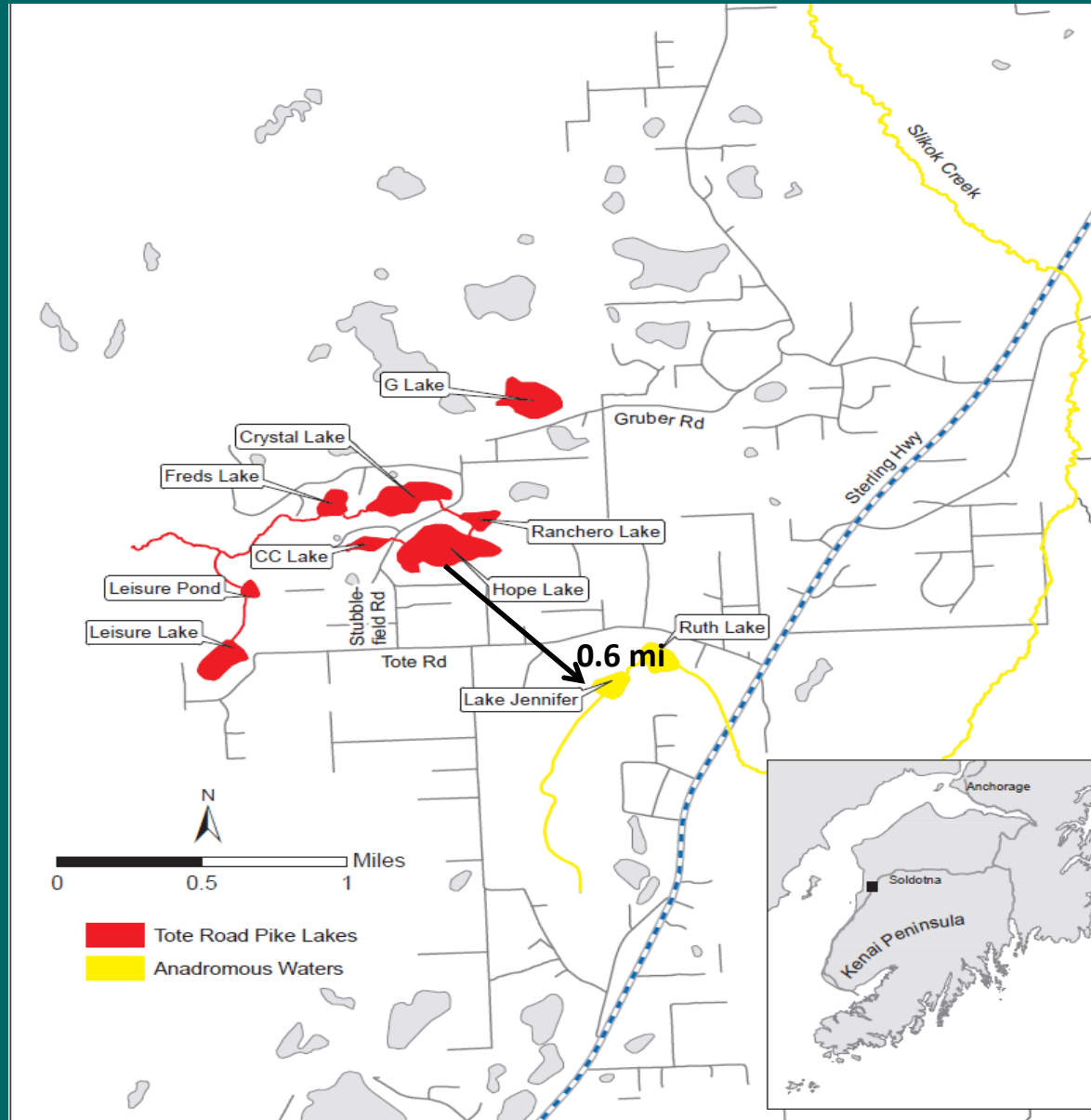
Status of Kenai Peninsula waterbodies where self-sustaining populations of northern pike have occurred

-  Northern pike population remains present
-  Northern pike population eradicated by ADF&G
-  Northern pike population disappeared from an unknown cause





# Tote Road Treatment Area





# Illegal Introductions are Always a Risk





# Upcoming Permits

- Alaska Department of Environmental Conservation: Pesticide Use Permit (public commenting period, winter/spring 2018)
- Environmental Assessment: (review and approval done by USFWS) (public commenting period, winter/spring 2018)
- Alaska Department of Natural Resources: Special Use Permit
- Alaska Department of Fish and Game: Fish Transport Permits (for stocking)
- ADF&G Board of Fish approval (AS 16.35.200)



# Eradication Milestone Timeline

- Pre-TX data collection(2017/2018)  
↓
- Scoping/Permitting (winter/spring 2018)  
↓
- Alaska Board of Fisheries approval request (March 2018)  
↓
- Pre-TX fish salvage (summer/fall 2018)  
↓
- Rotenone application (October 2018)  
↓
- Post-TX fish cleanup/water monitoring (Oct. 18'-Oct. 19')  
↓
- Fish stocking (Summer 2019)





Questions?